

Prototype Design Guidelines

U.S. Department of Labor
Employment and Training Administration
Office of Job Corps



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October 13, 2003

CAFETERIA

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Introduction

Objective

The purpose of the cafeteria buildings on campus is to prepare and serve food. Typically, the majority of the patrons of the cafeteria are the resident students on campus. The non-resident students, staff, and occasional guests constitute the remainder of the patronage. The cafeteria is the common component of the “day campus” and “night campus,” which also includes the dormitories and the recreation building. Therefore, cafeterias in general should be located within short walking distances from these functions. Vehicular access is required to the cafeteria for the delivery of goods and supplies, equipment delivery, and trash pick up. Emergency vehicle and fire engine access is also required for all major buildings on center. Thus, there is a need to have the cafeteria accessible to a major access road.

The main objective is to provide a cafeteria building that fulfills the basic criteria of :

- Functionality
- Safety
- Accessibility
- A pleasant dining environment

At the same time, the buildings should be economical to build and easy to maintain. The image of the Job Corps as an institution of learning and professional success is a perception to be projected by all the buildings on the center.

Prototype

This document is intended to function as a guide in the design of new cafeterias for Job Corps Centers. It describes the basic design principles of the prototype cafeteria, which is modular in nature. It also discusses, in some degree of detail, the different findings of the prototype team determined as a result of Post Occupancy Evaluations conducted at a number of centers. Detailed descriptions of certain cafeteria spaces have been included based upon the nature of their functions. These spaces have specific functions which relate to the requirements of the cafeterias designed for Job Corps. It is understood that each project presents unique challenges to the designer, but the end result of the design exercise should incorporate the concepts of basic organization, functional layout, and physical size. These parameters could change depending on a number of variables, but these will be identified in each specific Scope of Work.

Each design team is expected to employ the services of an experienced kitchen consultant during the actual design process of Job Corps cafeteria projects.

Design Concept

Modular Design

The underlying theme in the cafeteria is one of modular design, where spaces having similar functional requirements are grouped in the form of activity modules. Activity modules are combined in different ways to arrive at different built forms (Axial, Frontal, Diagonal, etc). The built forms respond to a multitude of varying site conditions, orientation, geography, topography, and climate.

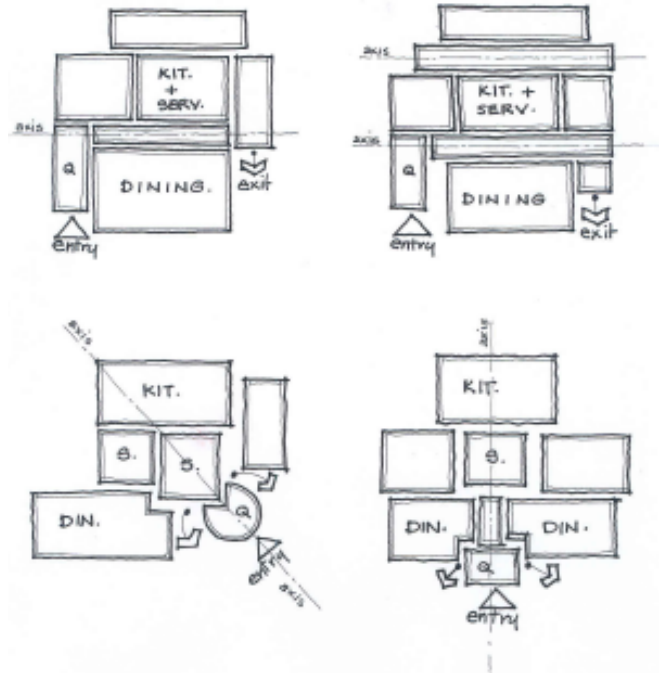
The modules constituting the cafeteria are: the Entry Module, Dining Module, Kitchen Module, Wash/Waste Module, the Support Module, and the Utility Module.

Modular Flexibility

The designer is encouraged to take advantage of the flexibility of this programming approach by adjusting the final building geometry to fit the site and center's needs. The figure at right illustrates some of the possibilities that work well, while maintaining general programmatic goals.

Modular Organization

The spatial organization of the cafeteria is based upon two major divisions. The “front of the house” holds all the public spaces which are used by the patrons. The “back of the house” holds functions performed by the staff and employees of the cafeteria. A common space (servery) serves as a transitional area between the two regions. This servery area is used by the patrons being served, the staff serving the patrons, and the administrative staff who manage/control the dining operations.



Variations: Modular Design Forms

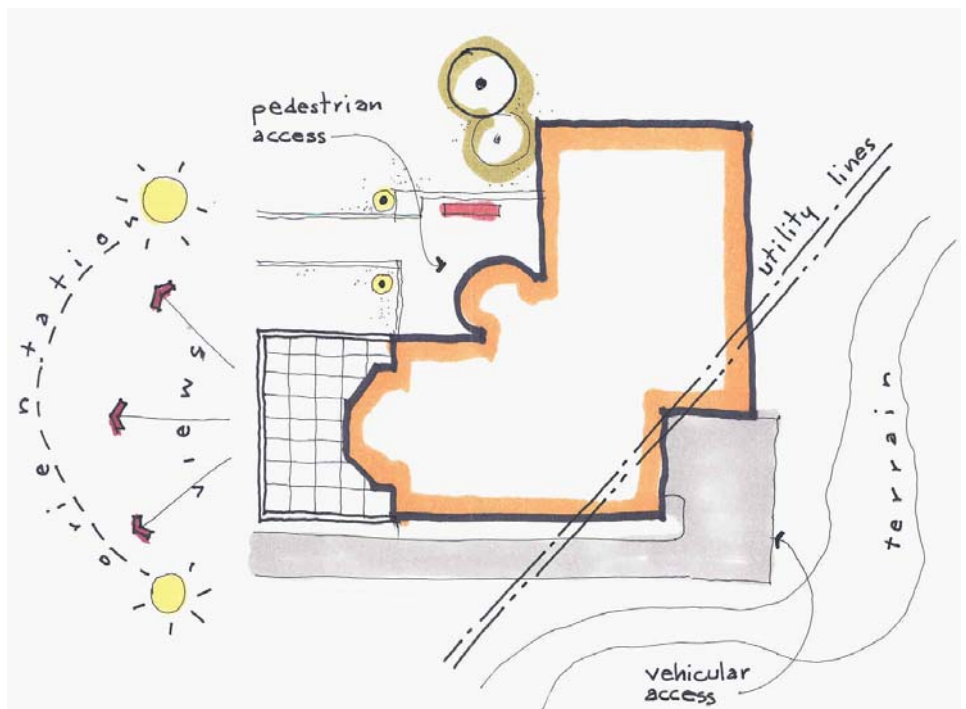
Design Considerations:

General Building Orientation

The cafeteria buildings on a Job Corps campus are subject to the same guiding principles that apply to other buildings on campus. The spatial organization of the building needs to take into consideration the different site conditions and microclimate.

Considerations that apply in general include:

- Cafeterias operate well in close physical proximity to the other elements of the night campus: the recreation building and the dormitories. Care must be taken to locate Cafeterias downwind from dormitory buildings. Adjacent buildings should be located such that odors from the cafeteria and garbage area is not pulled into their air intake systems.
- Cafeteria buildings play a significant role as a communal gathering space and enhance a campus feeling within the center.
- Effort should be made to take advantage of the natural amenities of the site such as good views and easy access to the site. Conversely, site constraints such as topography, climate, solar orientation, and the physical layout of the site, needs critical consideration as well.
- The architectural character of the region in general, and the center in specific, should be maintained to the maximum extent possible. The cafeteria building should reflect the general style of the prevailing architecture on campus.
- The buildings work best in simple configurations. Refer to Chapter 2 for typical modular layouts.
- Supervision and control are required in all interior and exterior areas.

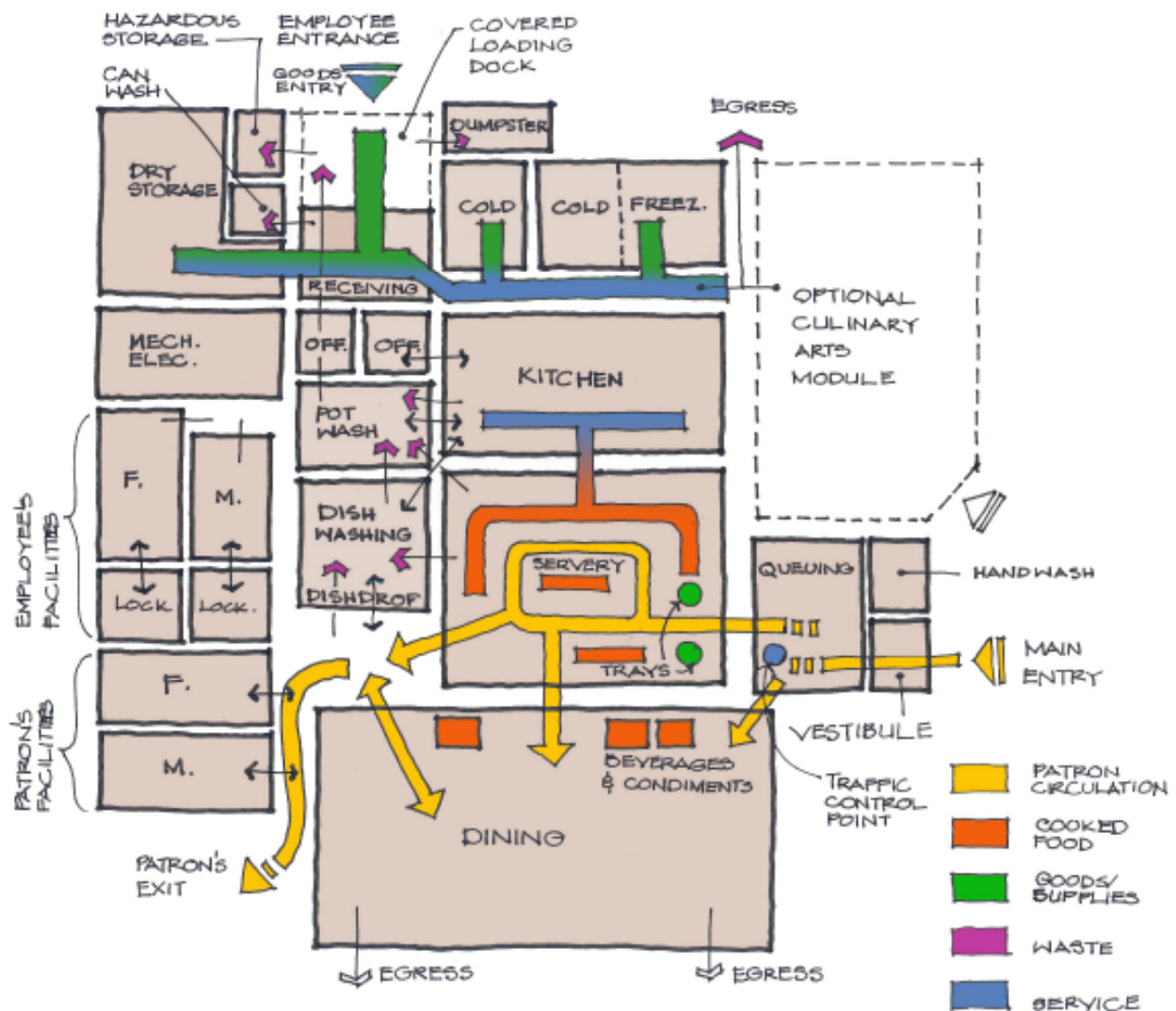


Site Considerations

Design Considerations

Spatial Relationships

The spatial relationship of the different areas in the cafeteria vary considerably. The back of the house functions, or the service areas, are related in a fairly specific and well defined way. The front of the house spaces - the queuing area, dining and outdoor seating areas, and the toilets, are more flexible in comparison. The size and location of spaces will vary depending upon the size of the center, and to some degree, the site itself. The overall physical layout of the building is determined by the actual configuration of the site and the programmatic needs of the specific center. The interior arrangement of spaces within the cafeteria buildings should be flexible enough to accommodate different activities and their needs. The designer has to be aware of the specific requirements of the modular layout and how they affect the overall design.



Spatial Relationships

Design Considerations

Adjacencies

The adjacencies of spaces play a major role in the design process of the cafeteria building. The following factors are critical when considering adjacencies:

Functional Grouping

- Modular design allows organization of spaces into functional groups or modules. Modular spaces relate functionally to each other, and can be grouped to perform a specific function such as the different spaces in the wash-waste module, or the spaces in the storage module. Spaces within each module are in close proximity to each other, but exceptions do occur where elements of the same module may be placed apart.

Layout

- The arrangement of spaces is a critical factor in the operations of a cafeteria. Distances traversed between the areas of preparation, storage, server, etc., affect overall efficiency and cost of operations. The frequency of trips to the different areas within the kitchen and prep area also has a major impact on the food service operations. The distance between different parts of the food preparation areas have to be kept at an optimum. The sequence of functions has to be maintained to achieve a smooth mode of production.

Optimal Usage

- Spaces need to be sized for optimal usage. Spaces that are too large, or too small, both adversely affect

the efficiency of the production process in the kitchen/prep area. Additional space may be detrimental to the preparation area if carried too far beyond the required dimensions. Overly large storage areas contribute to overall inefficiency and drive costs up. Most present day cafeterias can be pared down to a great extent by reducing the amount of storage space in the program. A smaller, more efficient storage facility can greatly contribute to the reduction in square footage and cost of construction in a cafeteria building.

Utilities

- The need to provide utilities to equipment/fixtures directly impacts cost. Utilities are the major portion of the costs involved in cafeteria construction. Proper grouping and arrangement of functions minimizes utility costs.

Design Considerations

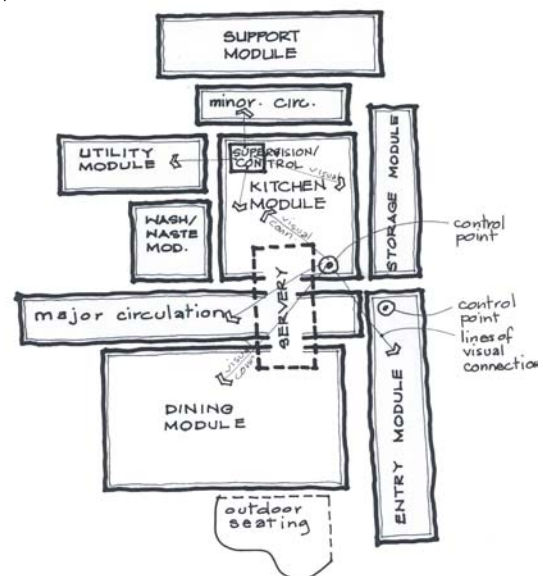
Security/Supervision

The cafeteria building must have an effective system of security and supervisory control. This applies to the entire building in general, but is especially critical at certain specific locations.

- Supervision and control is required at the building entrance. Students usually gather at the entrance to the building before it is open for operations. This area needs control and supervision as it is normal for students to get restless or playful while waiting for the building to open. Visual connections are required between the entrance areas and the building interior to ensure the fulfillment of this requirement.
- One point of control is the entry to the servery area where students gather to receive their meals. This is at the end of the queuing line after the handwash area. Cafeteria staff or other administrative staff usually control the number of students being served at one time. They also maintain the overall discipline in the dining area. Often the center policy is to allow only a limited number of students into the servery at one time.
- The other area requiring control and supervision is the receiving room at the back of the kitchen. This is to prevent pilferage and provide supervision of the kitchen staff and its operations. It is essential that the kitchen supervisor's office has visual connection to the receiving area. The kitchen and preparation area also require constant supervision and control to maintain safety and efficiency of operations.

The following factors are critical when considering security/supervision in the cafeteria:

- Areas of student movement and congregation require constant supervision.
- Maximum visibility and visual control of the entrances/exits into and out of the building are required.
- The servery and main dining areas require a high degree of supervision. Visual connection between these areas is important.
- Visual connection between the supervisor's office and the receiving area is critical.
- Visual connection between the supervisor's office and kitchen/preparation area is essential.



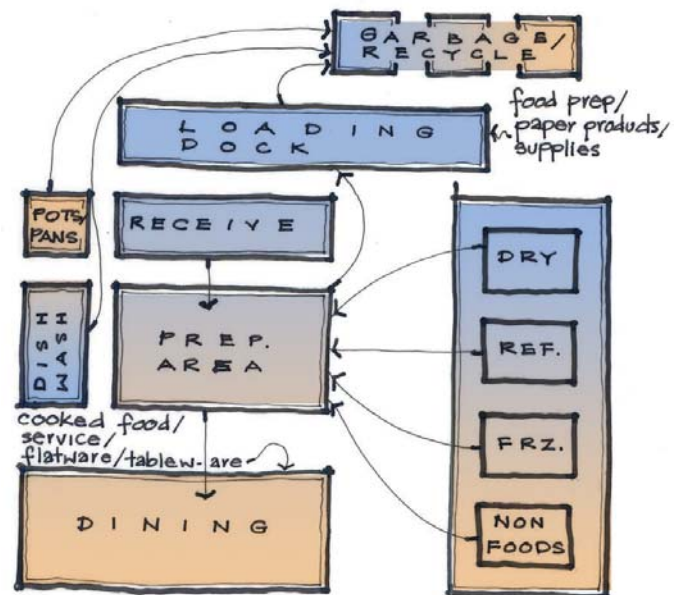
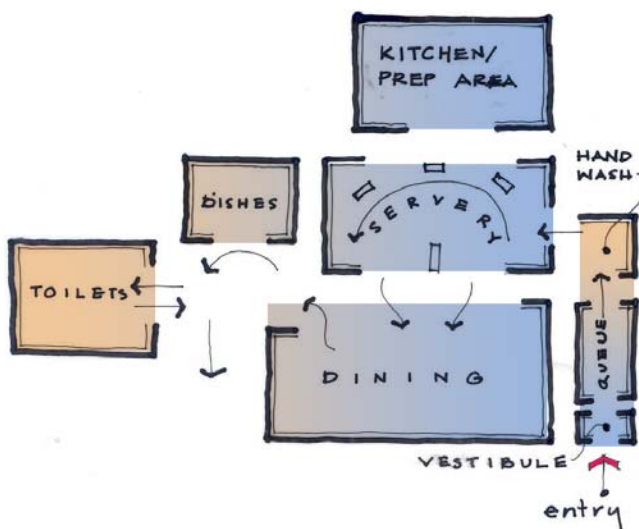
Security/Supervision

Design Considerations

Circulation

- **Patrons:**
This group includes the students and staff who use the cafeteria for their meals during different times of the day. The building circulation needs to accommodate high volumes of traffic for short periods of time to cater to the patron traffic.
- **Staff:**
The staff operating the cafeteria consists of the supervisor/head cook and a team of assistants who prepare the meals. Major circulation occurs at both peak and non-peak hours. The focus of work shifts from prep area to servery area during serving times, and then to the dishwashing area after that. The cycle is repeated at every mealtime.
- **Food Supplies:**
From the loading dock to different areas of storage. Timing may be critical when frozen foods or perishables are involved.

- **Non-Food Supplies:**
From the loading dock to non-food storage. Timing usually is not critical. These items include paper products and cleaning supplies.
- **Prepared Foods:**
Circulation takes place between food prep area/ kitchen and servery. Timing is critical for these functions. Maximum efficiency is essential.
- **Waste Products:**
Waste products from the prep area, servery, dishwash area, pots and pans, as well as dining area, are gathered and sent out to the dumpsters. Vehicular circulation removes waste products from site periodically.



Circulation: Products

Design Considerations

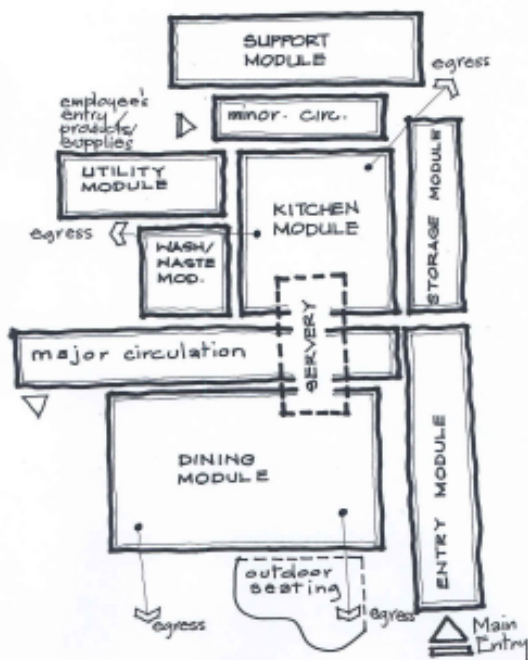
Accessibility and Egress

Full accessibility is required to all areas of the building in the case of new construction. This includes the dining area, outdoor seating area, servery, toilets, and tray drop off area. In addition, the service spaces such as the kitchen/prep area, storage areas, dishwashing area, etc, require full accessibility. In the case of renovation projects, the extent of accessibility depends upon the extent of renovation and scope. All mounting heights, clearances, and dimensions of fixtures, outlets, and hardware have to comply to codes per UFAS and ADA.

- Egress requirements are critical in the dining area due to the congregation of a large number of people in a single space.
- The main entry doors are used to enter the building by the patrons at mealtimes. The main exit doors are used by the patrons to exit from the cafeteria. usually

located across the dining area from the main entry. Double doors should generally not be used. A combination of two single doors with separate door frames and a jamb in the middle is to be used for main entry and exit doors.

- The main entry for products and service personnel is served by a set of double doors from the loading dock to the receiving area. An additional entrance for employees may be provided off the loading dock.
- All doors are to perform as egress doors in the event of an emergency and should contain the requisite hardware (panic bars with closers on the interior side) to allow exiting from the building per applicable codes.
- Exit from the dining area into the outdoor seating area should contain heavy duty entry/exit hardware.



Accessibility/Egress

Fire Safety

- The potential fire and smoke hazard is of the utmost concern in the case of staff/employees in the kitchen area. Most recent models of cooking equipment have safety measures built into the system.
- The cafeteria building is to meet all codes regarding fire safety per NFPA and other national and local codes.

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Design Considerations

Auditory

Areas of public usage can be a major source of noise during mealtimes. Acoustical treatment of these spaces must be carefully considered:

- Employ acoustical materials/finishes to absorb sound on floors, walls, and ceilings. This must be done with careful consideration in the case of carpeting on the floors. While some regions have specified carpeting, most prefer vinyl or tile floors.
- Use hard surfaces, such as glass and metal, judiciously in order to minimize reverberation of sound.
- Break continuous surfaces, such as ceilings and walls, by means of coffered ceilings, bulkheads, and 3-dimensional decorative elements.

Olfactory

The back of the house spaces generate many odors, both pleasant and unpleasant. Particular attention must be given to the separation of spaces based upon olfactory considerations.

- Adequate ventilation is essential to reduce unwanted odors from different areas.
- Care must be taken to ensure that levels of food aromas are controlled in the server area.
- Handling of garbage and its processing must be given careful consideration. Olfactory control is critical in this area.

Colors, Graphics, Visual Imagery

The cafeteria should be a place of enjoyment and relaxation for the students. Mealtimes constitute an important part of their everyday living at the center. As such, the visual environment of the building should reflect the positive aspects of the dining experience.

- Public spaces should be brightly colored, brightly lit.
- Queueing area should have some graphics to convey the anticipation of the mealtime experience.
- Generous use of graphics and colors. Central areas can be decorated in different seasonal colors.
- Server area is to have graphics conveying information about the food being served. Signage should be used extensively to eliminate confusion in the meal selection process.
- Use of neon or colored lights is recommended in server and dining areas.
- Indicators of food stations that are open for operations should be provided in food stations.

Maintenance/ Pest Infestation

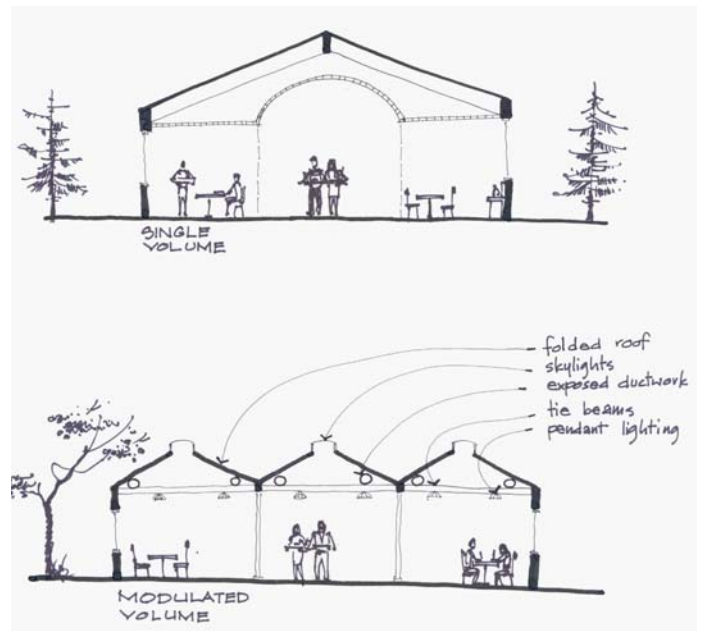
- Care must be taken to prevent infiltration of insects, birds, rodents and all other kinds of infestation. The cafeteria building requires a high degree of maintenance to ensure that all spaces within are safe and hygienic. Cleanliness must be a high priority throughout the building, but is specially critical in the food handling and preparation areas as well as the garbage handling areas.

Design Considerations

Scale

The cafeteria serves as the main point of congregation for the majority of students on campus. This is the one building on center where most students gather at multiple times during the day. The resident students gather there for all of their meals. Most of the non-resident students have at least one meal at the cafeteria. The cafeteria is also the venue for social events such as parties, special events, and meetings.

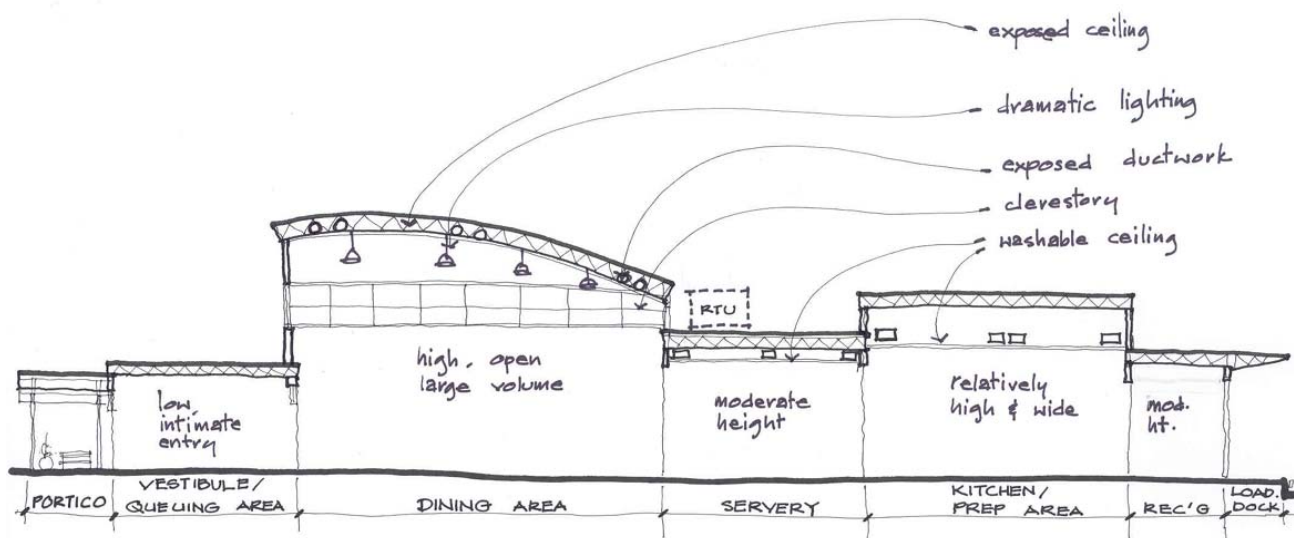
The scale of the public spaces in the cafeteria building should reflect these uses.



Scale

3-D Relationships

Another important design consideration is the volumetric relationship of the various spaces within the building. Because this type of facility houses such a wide variety of functional activities, the vertical proportions must be carefully considered.



3-D Relationships

Basic Modules

Components

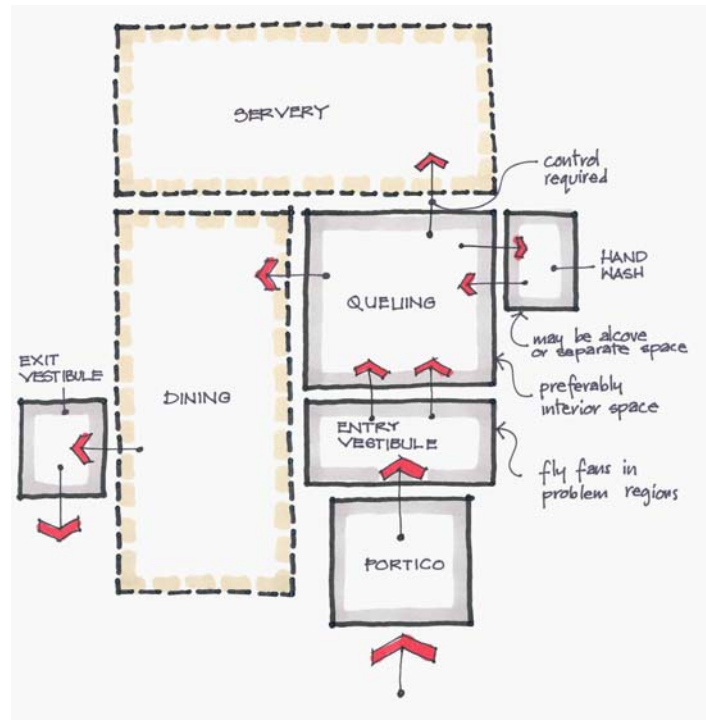
There are a variety of spatial elements constituting a Job Corps Center cafeteria. These elements vary in size as well as function and are directly related to the programmatic needs of the center. Job Corps Center populations vary in size from 82 students to over 1,900 students residing on campus and making daily use of the cafeteria. The cafeteria building generally houses multiple functions in the life of the campus, from daily dining hall functions to monthly and yearly center events.

During the course of many Post Occupancy Evaluations, interviews were held with administration, staff, and students. These discussions, along with extensive building surveys, have produced a series of "lessons learned" to guide future designs to incorporate what elements work best and eliminate those that do not work well. These have been summarized under the various modular groupings.

Due to the wide spectrum of programmatic needs the cafeteria is required to fulfill, this building type is presented as a group of functional modules which come together to perform a unified function. To this end, components have been grouped together in functional modules. These modules are not presented as absolute in structure, size, or orientation; rather, they are meant to be flexible and provide the greatest latitude for the designer while addressing program specifics.

Prototype Design Guidelines

ENTRY MODULE



Entry Module

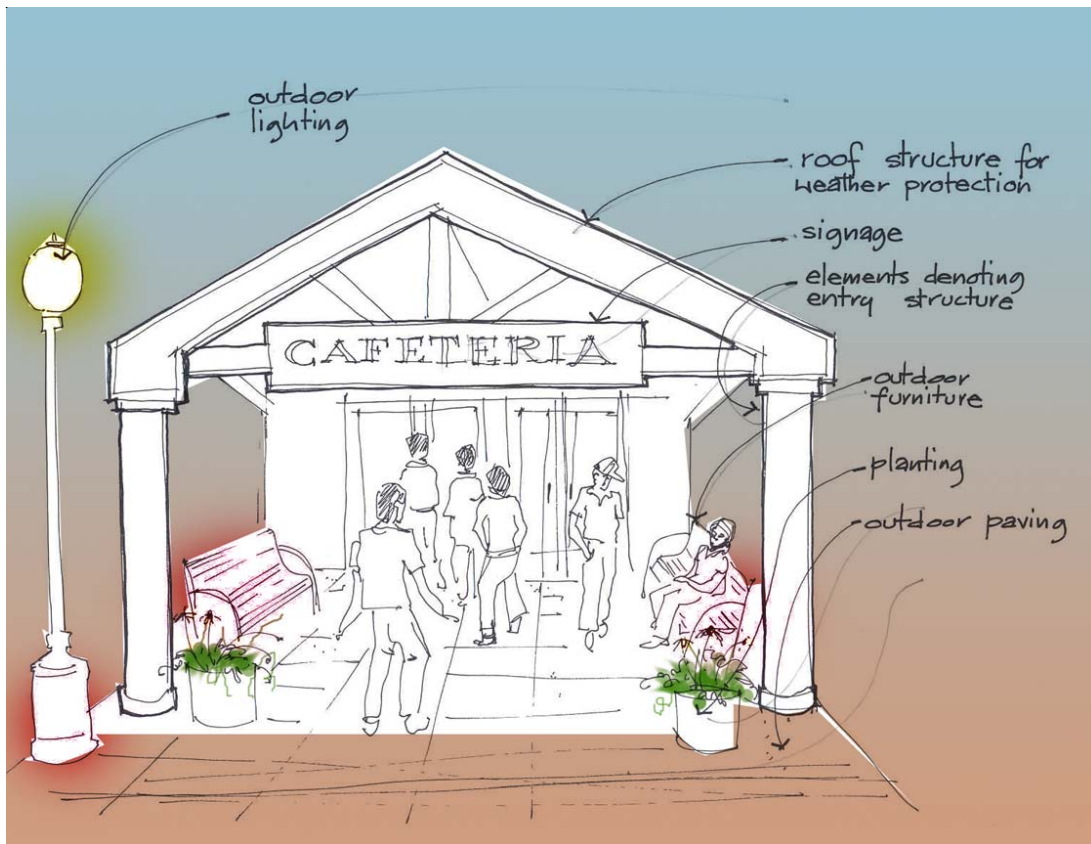
Vestibule

- Vestibule is to be open, accessible, and simple in design.
- Vestibule is the actual entry point into the building. Clear, well defined area, with sight lines into all adjacent spaces.
- Security and control are major considerations. This applies to both peak hour usage and after hours operations.
- Finishes should be tough, sturdy, and easy to maintain. This area is subject to heavy traffic at mealtimes.
- Special consideration should be given to flooring in climates where excess snow creates slippery conditions. Provide recessed floor mats in vestibule.
- The vestibule doors are the primary entrance to the facility, as well as the primary exit. All other exterior doors to serve as audibly alarmed emergency egress doors. Proper signage and hardware is required for all doors.
- Provide adequate lighting in both vestibule and lobby for nighttime usage and security for after hours usage.
- Air screens to be provided at entry doors in warm climates to keep out insects.

Prototype Design Guidelines

Portico

- Covered porch/portico/outdoor area provides protection during inclement weather, therefore, should be of sound construction to withstand different weather conditions.
- This area functions as a visual element denoting the entry into the building. Efforts should be made to utilize this device for image making. This element can give a distinctive entrance to the cafeteria building.
- The covered porch/portico often functions as a pre-queuing area when the building is closed to students before meals are served.
- Some outdoor furniture and landscape elements should be incorporated into the design of this area.
- Students tend to prefer this location to gazebos for smoking purposes, specially during inclement weather. However, smoking is discouraged in this area.
- Provide outdoor lighting in this area for mealtime usage, as well as for after hours security.

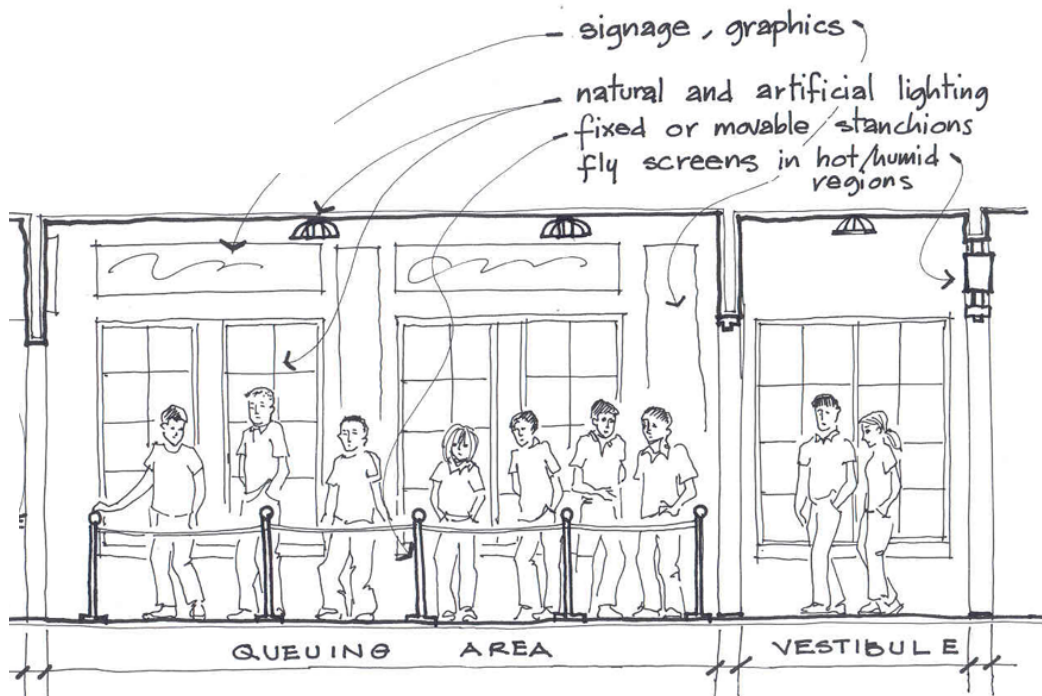


Portico

Prototype Design Guidelines

Queuing Area

- The queuing area should always be an interior space, regardless of climate. This area should be a linear space, preferably running alongside the dining area.
- Space is to be provided for more than one queuing line. Multiple queuing lines are critical for the efficiency of the mealtime operations, bringing down the overall time of the food services activities. Use portable stanchions for separating queuing spaces.
- Cafeteria staff provide control at entry point into servery from queuing area. This ensures control and discipline in the queuing area, as well as in the servery and the dining area. Visual connections and sight lines between these spaces are critical in the design of cafeterias for Job Corps.
- Material/finishes should be tough, sturdy, and easy to maintain.
- Colors and graphics should be bright and exciting. Avoid presenting an institutional character.
- Signage providing information about available food selection may be posted in this area.
- This area needs to be well-lit for regular dining hours.
- Some utility outlets are required for general purposes.
- Provide adequate ventilation for all weather conditions.

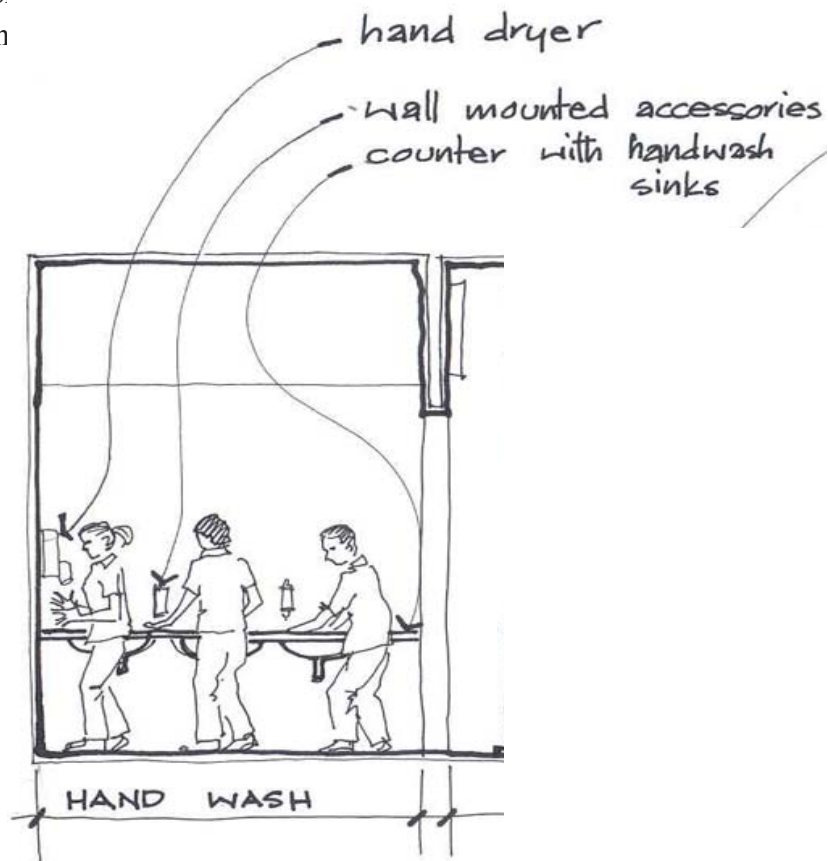


Queuing and Handwash Area

Prototype Design Guidelines

Handwash Area

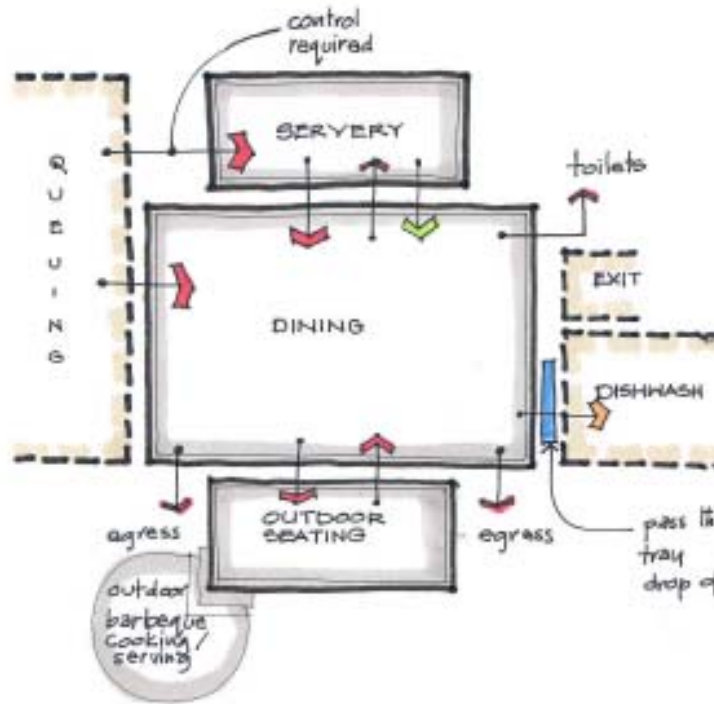
- Hand wash sinks should be provided near the end of the queuing area. Fixtures can be multiple units for individual users, or single ganged fixture for multiple users. Fixtures must have clearances and mounted at heights per UFAS and ADA requirements
- Wall mounted hand dryers are to be provided to reduce paper trash. All fixtures to be compliant per UFAS and ADA requirements.
- Material/finishes should be tough, sturdy, and easy to maintain.
- Colors and graphics should be bland. Avoid the appearance of having a character.
- Provide adequate lighting for day and nighttime usage. Some utility outlets are required for general purposes.
- Ensure plentiful natural light for daytime use. This area needs to be well-lit for regular dining hours. Some utility outlets are required for general purposes.
- Provide adequate ventilation for all weather conditions.



Handwash Area

Prototype Design Guidelines

DINING MODULE



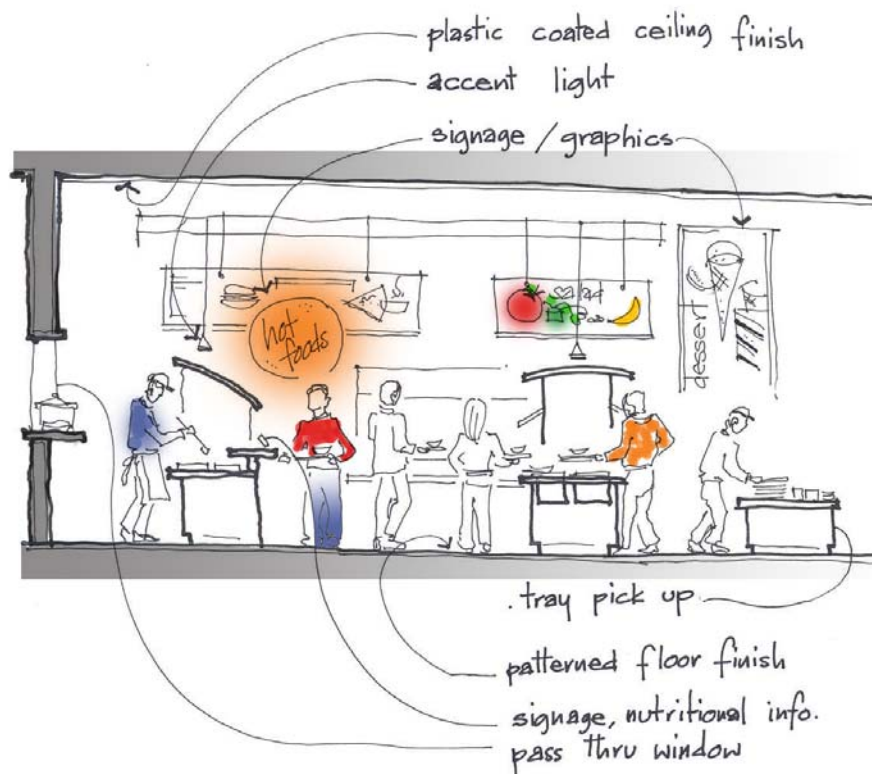
Dining Module

Servery

- Define clear, wide traffic patterns into and out of the servery. Well defined circulation is critical to the success of a well designed servery area.
- Scramble style serving should be provided. This method accommodates more students at the same time, while reducing total serving time. Clearly defined queuing areas at different stations should be provided. Efficiency is increased by reducing congestion and confusion at the serving line.
- The servery requires direct access to the kitchen and the dishwash area. Direct circulation paths are essential.
- Vision panels are required between the food preparation area and the servery. Pass thru windows add efficiency.
- Entry to dining should be wide enough to eliminate bottlenecks yet easily controlled for customers returning for seconds.
- Separate stations for hot food, “fast food,” or sandwich bar work well.
- Movable, island salad bar(s) with self-serve china add to the orderliness of the service.
- Locate the condiments close to the dining area entry (on either side).

Prototype Design Guidelines

- Adequate signage to describe food types and the ingredients of each dish (to help customers recognize foods they either dislike, do not want, or may have allergies to).
- Bright colors, bold graphics and an exciting presentation of food items are essential in developing the visual image of the dining experience. Avoid the appearance of having an institutional character in interiors.
- Quarry tile and cove base with dark grout shall be used. Patterned tile flooring limits visual effect of food spills and stains.
- Stainless steel may be used on serving counters.
- Ceiling should be easily cleanable and moisture resistant. Bulkheads may be used to separate served areas from service areas.
- Accent lighting and down lighting to emphasize stations (turn off down lighting if stations are closed).
- Provide signage or graphics in neon or fiber optics if possible. Bright, cheerful lighting is encouraged.
- Provide power at 72" above finished floor behind each station for flexibility in future.
- Proper ventilation is required for this area. Neutral air pressure is recommended in this area. Some residual aroma is considered pleasant, but some ventilation is required for reducing heat, fumes and food related odors.



Servery Area

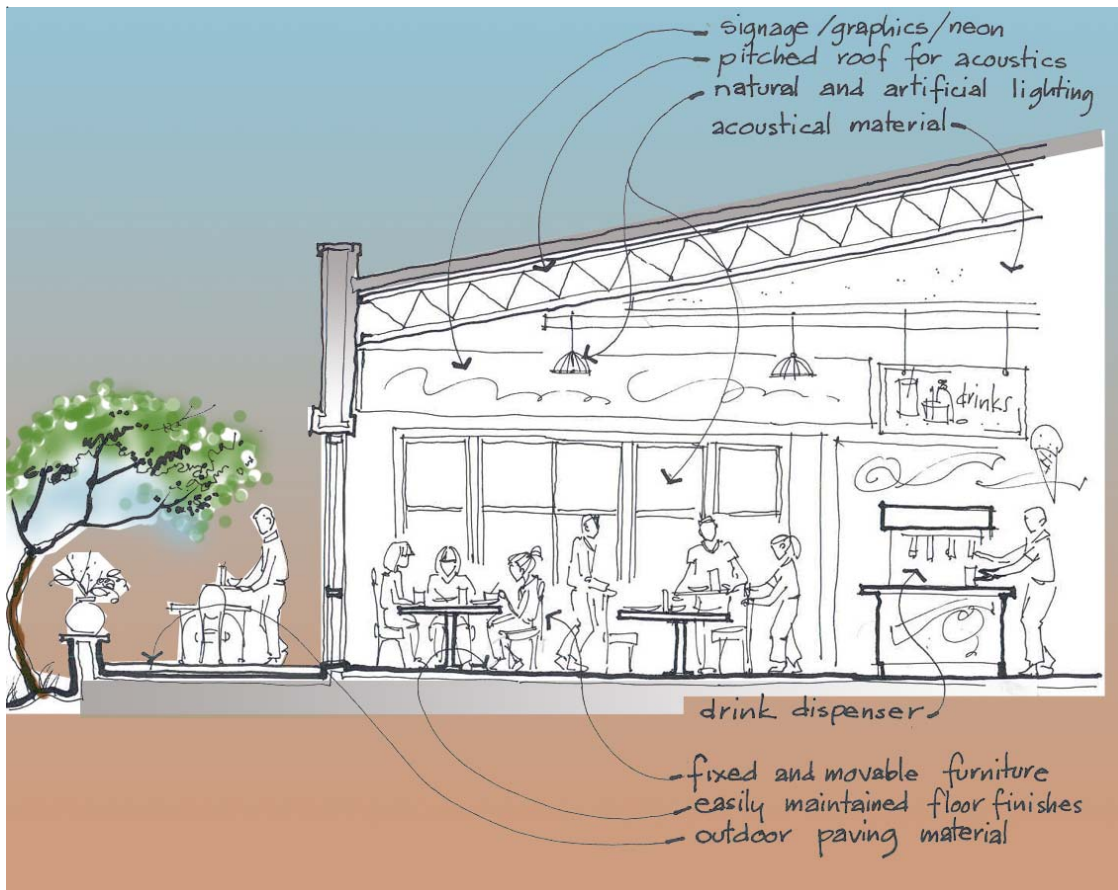
Prototype Design Guidelines

Dining Area

- Good traffic circulation must be maintained. Beverage stations should be located at perimeters close to the servery exit.
- Force exit traffic past tray/dirty dishes drop-off. Consider use of rolling carts for overflow at tray/dirty dishes drop-off.
- A combination of seats and stools, with movable furniture should be provided. Some fixed booths may also be provided. Seating needs to accommodate both obese and handicapped customers.
- Break up large spaces with columns, bulkheads, contrasting materials or colors, etc.
- Echoing can be minimized by using acoustical material on walls and ceilings. Large groups of users can generate a high level of noise.
- Consideration must also be given to other periodic uses of the dining area including special events and ceremonies.
- Use colors, plants, natural and artificial lighting, glass, or other finishes to create warm, comfortable spaces of human scale.
- Quarry tile or VCT for floors is generally recommended, with quarry cove base.
- An effective use of carpeting could be used as inserts in quarry tile or VCT flooring.
- Ceramic wainscot and painted CMU walls (split faced block, glazed block, or other masonry units) work well as alternates. Always use bull nosed blocks and corner guards for all outside corners.
- Avoid gypsum board or ceramic tile on walls except as accent elements. Some may be used as decorative elements to add variation and color to the dining area.
- Acoustic tile systems with some gypsum board bulkheads as ceilings are recommended.
- Areas may be accentuated by changes in heights of ceilings. Large ceiling surfaces should be broken up to create variation in spatial quality.
- High, pitched ceilings help control acoustics. Higher ceilings reduce noise (10' or higher desired). Design curved surfaces, if possible.
- Ambient lighting should be a combination of fluorescent and incandescent down lights.

Prototype Design Guidelines

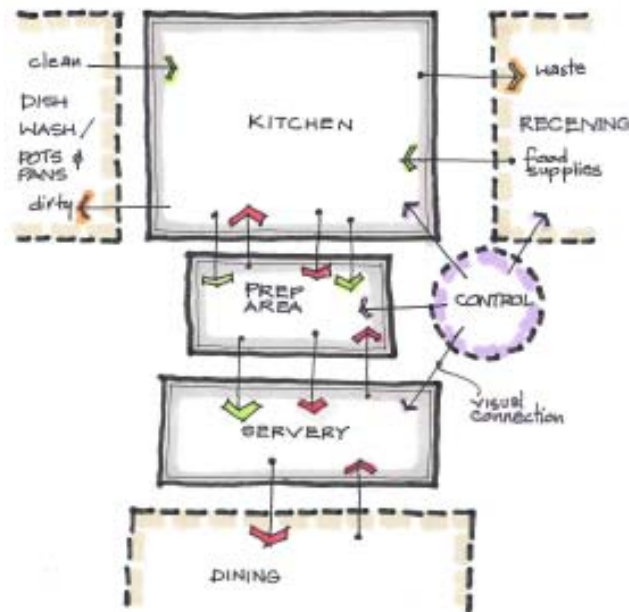
- Accent lighting for food on display in the dining room should be provided.
- Neon and other decorative signage should be used to generate color and excitement.
- Adequate power must be provided for dining room functions, as well as for center wide or community events such as dances or meetings that may be held in this area.
- Ventilation is critical for this area. Adequate ventilation must be provided to accommodate the large volume of users combined with heat and odors generated by cooked food.



Dining Area

Prototype Design Guidelines

KITCHEN MODULE



Kitchen Module

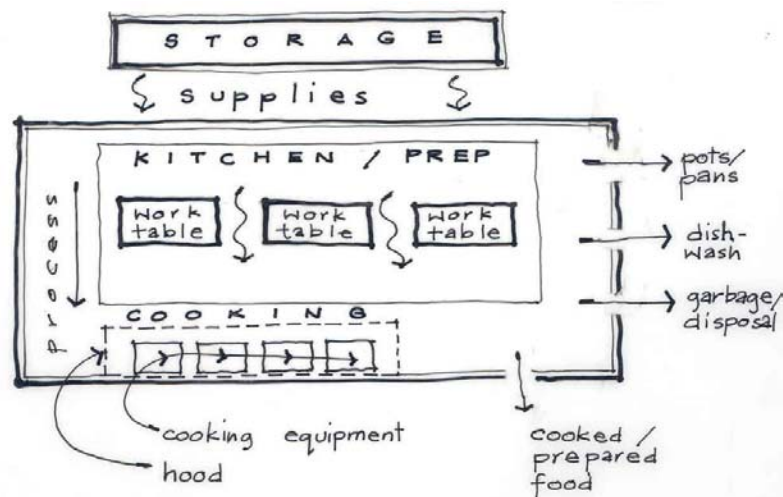
Preparation Area

- Direct access is essential to servery and storage areas. Easy access to pots/pans area is required. Accessibility and supervisory control is essential in this area.
- Adequate equipment and proper layout based on sequence of operations is critical in this area. Adequate circulation space around the equipment is essential.
- Use slip-resistant quarry tile with epoxy grout or epoxy resin floor systems. The use of rubber mats in foot traffic areas is helpful in maintaining efficiency and safety of operators.
- Design sufficient floor drainage with properly sloped slab.
- Walls, ceiling tiles and grids, and grilles/registers need to be water, mold, and condensation resistant finishes.
- Preparation area should be brightly lit with overhead fluorescent lighting.
- Adequate power is to be provided at all stations for food service equipment. Coordinate locations and requirements to equipment.
- Power may be provided by means of poles to ensure flexibility of use and ease of maintenance at the preparation tables. Construct low walls alongside cooking equipment to accommodate power lines.
- Plumbing lines are to be provided per design layout. Refer to SOW for numbers, dimensions and configuration.
- Proper ventilation is essential. A slight negative pressure is recommended to prevent air movement into adjacent areas.

Prototype Design Guidelines

Kitchen Area

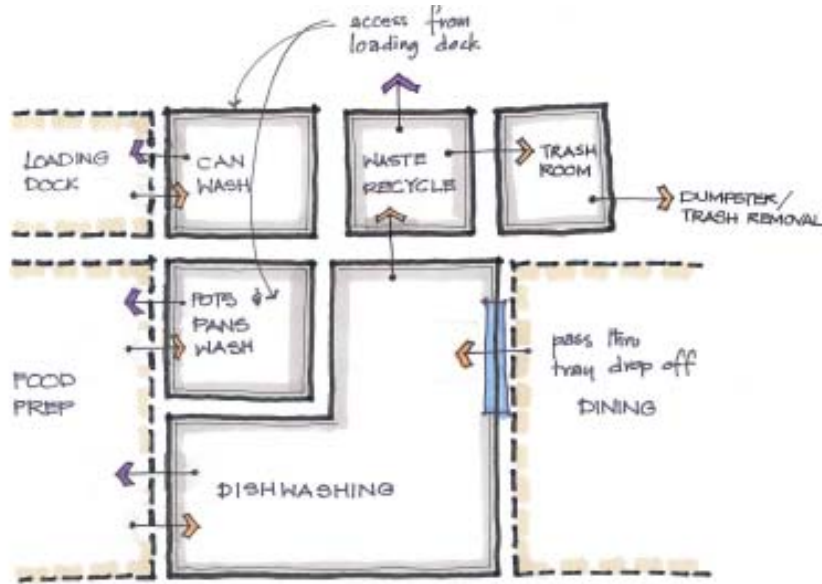
- Direct access is required to the preparation area. Must have close proximity to servery. Easy access to pots/pans area is required.
- Supervisory control is essential in this area. Visual connection to the supervisor's office is required.
- This area is provided with commercial cooking equipment. Adequate equipment and proper layout based on sequence of operations required.
- Adequate circulation space around the equipment is essential.
- Use slip-resistant quarry tile with epoxy grout or epoxy resin floor systems.
- The use of rubber mats in foot traffic areas is recommended.
- Floor sinks, Floor troughs and Floor drains built into the slab are required for some kitchen equipment. Refer to engineering drawings for location and extent.
- Walls, ceiling tiles and grids, and grilles/registers need to be water, mold, and condensation resistant finishes.
- The kitchen area should be brightly lit with overhead fluorescent lighting. Most equipment and grease ventilators used in this area contain their own lighting.
- Adequate power is to be provided at all food service equipment. All equipment is to be hard wired.
- All plumbing and gas lines are to be provided by contractor per design layout. Refer to SOW for actual number, dimensions and configuration.
- Proper ventilation is essential. A slight negative pressure is recommended to prevent air movement into adjacent areas.
- Ventilators over cooking equipment should be mounted at 6'-6". Stainless steel trim panels to be provided by hood manufacturer.



Kitchen Layout

Prototype Design Guidelines

WASH-WASTE MODULE



Wash-Waste Module

Dishwash

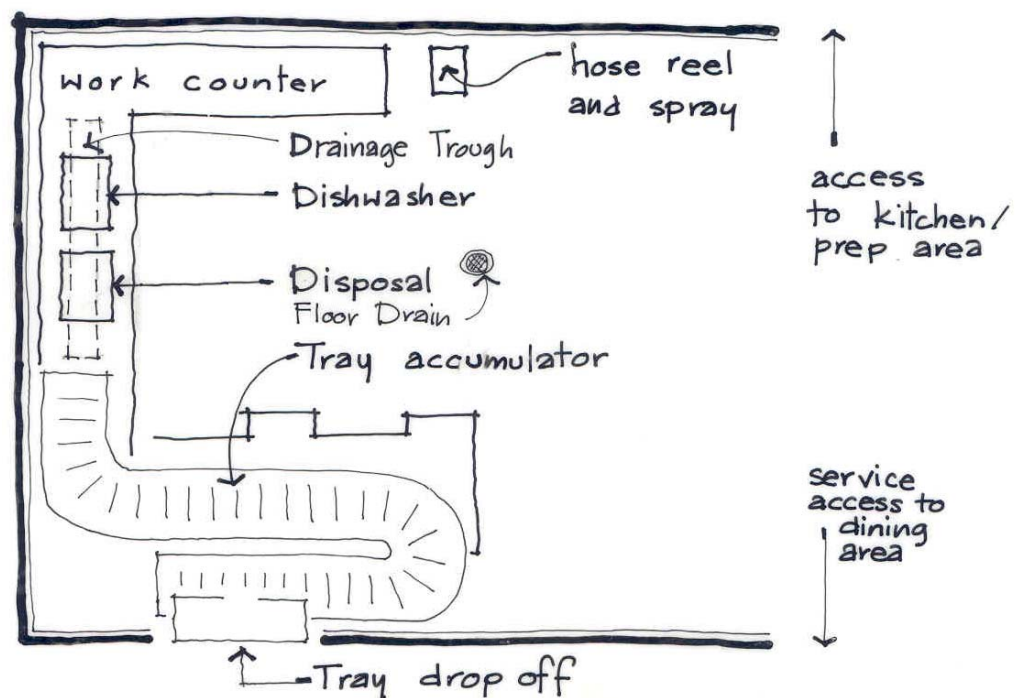
- Tray carousel is recommended for essential operational procedures. Provide direct access into dining area. Locate at end of food serving area.
- Proper access and circulation is essential for efficient operations.
- Design layout and circulation to prevent water from dirty dish spray stations to contact clean dish areas.
- Maintain good traffic circulation around all equipment.
- Use slip-resistant quarry tile with epoxy grout or epoxy resin floor systems. Proper selection of flooring system is critical. Use of rubber mats in foot traffic areas is recommended.
- Provide either floor trough or floor drain for proper removal of excess water. Floor trough, if used, should be located underneath equipment and not in areas of traffic.
- Design properly sloped floor slab. Ponding of water may take place otherwise. Proper sloping of floor slab is critical in this area.
- Walls, ceiling, and grilles/registers need to be water, mold, and condensation resistant finishes. High temperature and moisture combine to corrode finishes. Use of suspended acoustical ceilings in this is strongly discouraged.
- Adequate ventilation and air movement is absolutely essential. High temperature and high moisture level in this area can create an uncomfortable environment and moldy conditions.

Prototype Design Guidelines

- This area should be brightly lit with overhead fluorescent lighting.
- Provide adequate space to store rolling racks for clean dishes and trays.
- Design sufficient floor drainage with properly sloped slab. Ponding of water may take place if floor is not properly designed.
- Walls, ceiling, and grilles/registers need to be water, mold, and condensation resistant finishes.

Pots and Pans Wash

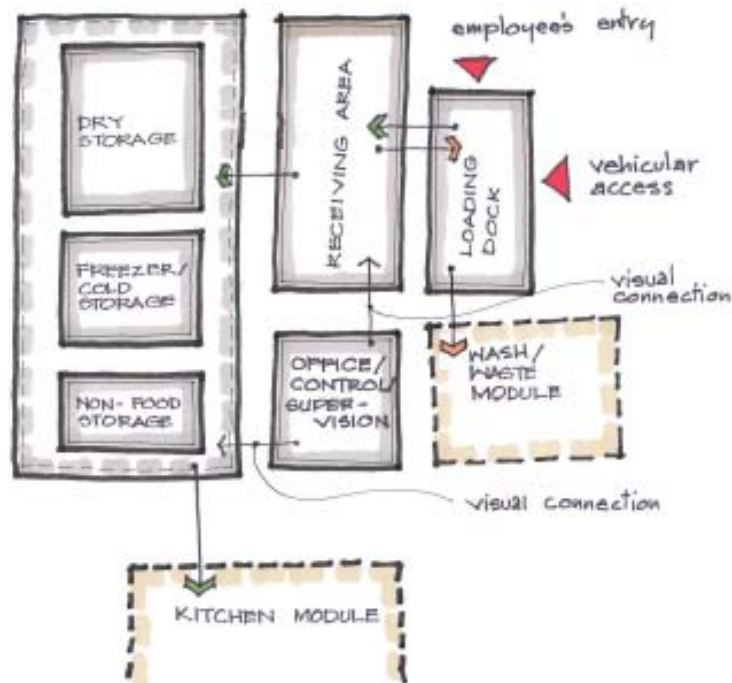
- Convenient access required to the food preparation area. Close proximity to dishwash area is also recommended.
- Maintain good traffic circulation around all equipment.
- Use slip-resistant quarry tile with epoxy grout or epoxy resin floor systems. Proper selection of flooring system is critical. Use of rubber mats in foot traffic areas is recommended.
- Adequate ventilation and air movement is absolutely essential.
- Space should be brightly lit with overhead fluorescent lighting.
- Provide adequate storage space for supplies, pots, pans and trays.



Dishwash Area Layout

Prototype Design Guidelines

SUPPORT MODULE



Support Module

Storage

- Storage areas follow the model of “just in time” delivery that is typical of institutional food services. This policy allows smaller areas to accommodate most storage needs.
- Food storage areas should be grouped together to ensure efficiency of operations. This includes dry foods as well as frozen and refrigerated foods.
- Food storage areas should be directly connected to the kitchen/preparation area.
- Non-food supplies do not have to open directly into the food preparation area, but should be within relatively close proximity.

- In the case of center locations which are remote and may have limited access to produce and supplies, the space may be increased by 20% over the required storage area of a center with a similar student population.

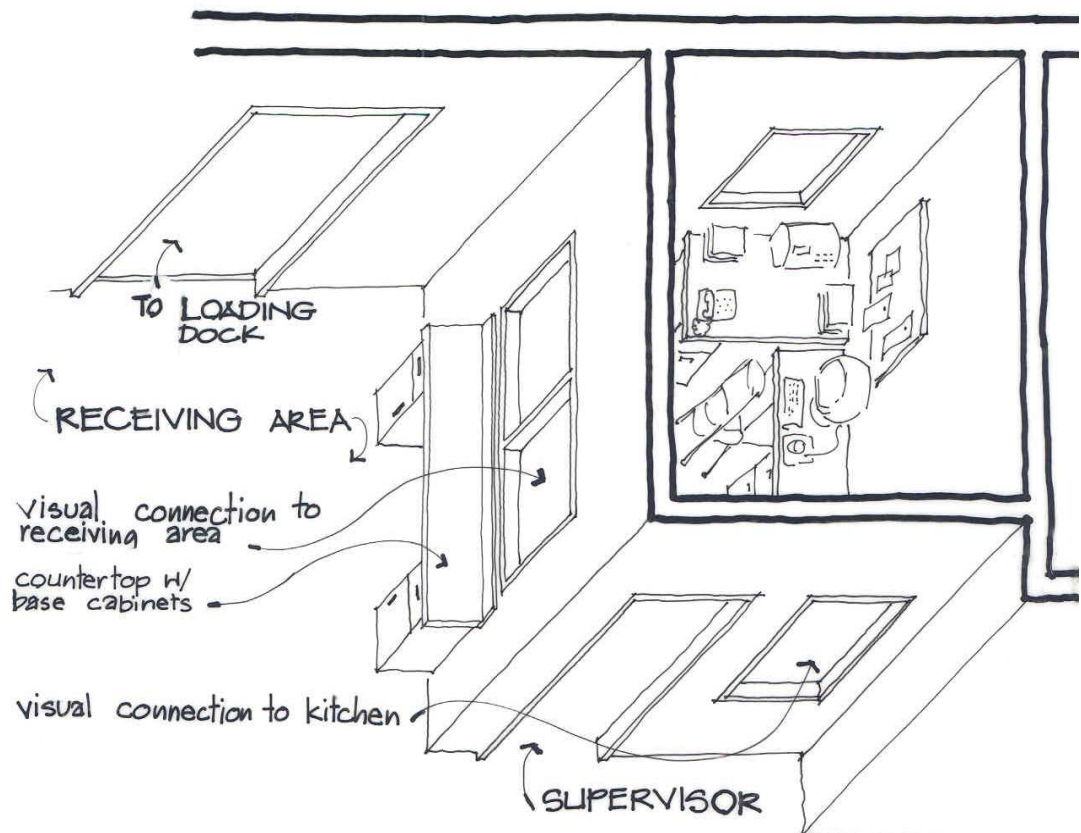
Receiving

- Receiving area should be visually connected to the Supervisor’s Office.
- Adequate ventilation is essential. Heat and odors from adjacent areas may create discomfort in hot, humid climates during hot seasons.

Prototype Design Guidelines

Supervisor's Office

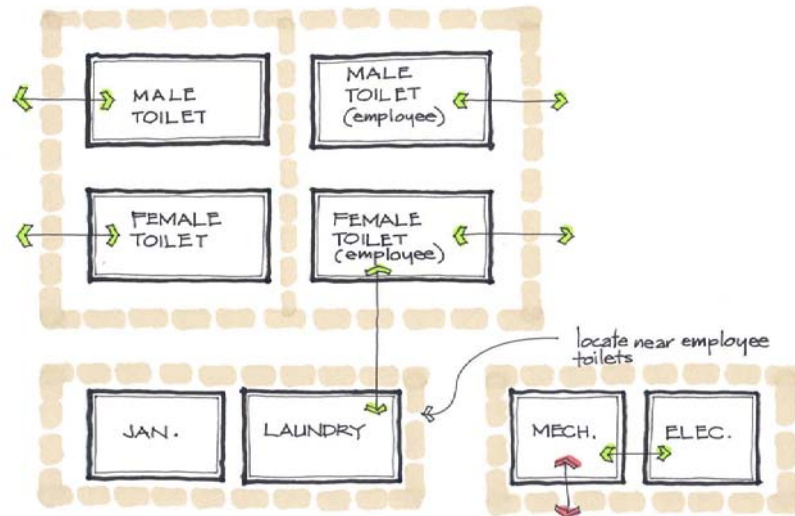
- Must be located with clear views to the service entry and receiving area. View to loading dock and exterior in general is advantageous, but not essential.
- Must have direct access to food preparation areas. Should be located in close proximity to the servery.
- May be elevated on a platform or at a mezzanine for greater visual control, if interior dimensions of the spaces allow. Accessibility must be maintained at all levels.
- Clear vision panels at desktop level must be provided for maximum visual connection into adjacent areas.
- Finishes and furniture layout is similar to typical office arrangement. Lockable door and cabinetry should be provided.
- Lighting layout and power layout as provided for typical office.
- Adequate ventilation is essential. Heat and odors from adjacent areas may create discomfort in hot, humid climates during hot seasons.



Supervisor Area

Prototype Design Guidelines

UTILITY MODULE



Utility Module

Toilets

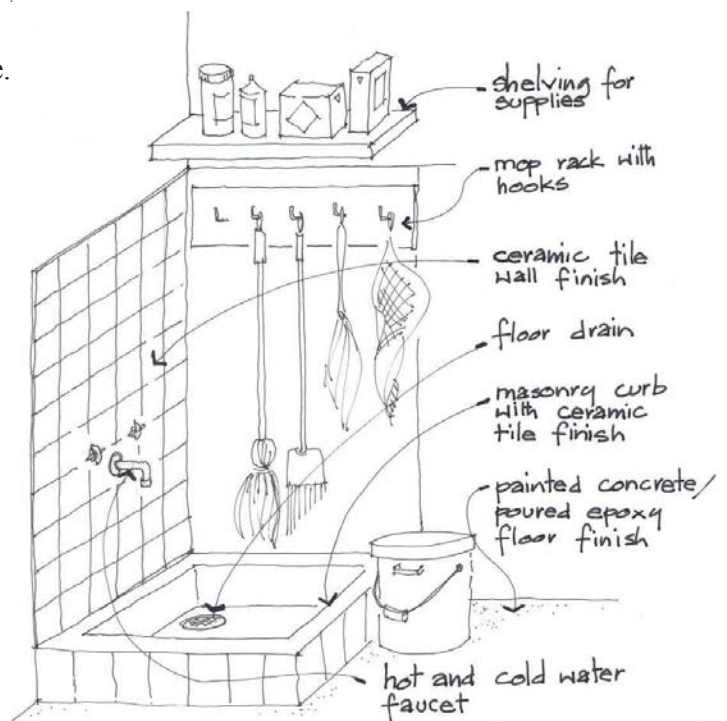
- The total number of fixtures is based on center population.
- Fixture parity for genders governs internal layout.
- Toilets are to be floor mounted.
- Toilet and urinal partitions are to be floor mounted only, preferably stainless steel.
- Electronic flush valves and water spigots are preferred (if not, water spigots should be timed).
- No goose neck type faucets are to be used.
- All dispensers (paper towel, toilet tissue, sanitary napkins, etc.) to be heavy duty, institutional grade.
- No dispensers should be coin operated.
- All louvres/grilles/registers are to be rust resistant.
- Ample floor drains with floor sloped to drains.
- Finishes to be impervious and durable
 - Floor: Ceramic tile with dark grout
 - Walls: Ceramic tile on masonry, floor to ceiling
 - Ceilings: Painted gypsum board (mold/mildew resistant type) or waterproof cement plaster.
- All toilet facilities are to be in compliance with ADA and/or UFAS.

Mechanical/Electrical Rooms

- Provide sufficient space for all mechanical and electrical needs.
- Locate close to toilet rooms.
- Access directly from exterior.

Janitor Closet

- Include a floor sink and a slop sink.
- Provide shelving and hooks .
- Provide ample exhaust using mechanical ventilation switched with the light fixture.
- Finish with painted CMU and exposed structure.
- Locate adjacent to the toilet rooms where possible.



Janitor's Closet

Program Requirements:

Adjacencies

The matrix presented below outlines the functional relationships between the various spaces that make up the cafeteria. The actual spaces required for each individual project will vary based on center population and Regional needs. These will be specifically designated in the project Scope of Work. The designer is to use the information provided below as a guide and adjust the overall design accordingly.

SPACE ADJACENCIES MATRIX

CAFETERIA	VESTIBULE	QUEUING	DINING ROOM	SERVERY	SUPERVISOR	OFFICE	KITCHEN	DRY STORAGE	GENERAL STORAGE	REFRIGERATOR/FREEZER	DISH WASHING	POT WASHING	MEN'S TOILET	WOMEN'S TOILET	MALE EMPLOYEES	FEMALE EMPLOYEES	LAUNDRY	RECEIVING	CAN WASH	JANITOR	80-250 STUDENTS (225 AVERAGE)	251-350 STUDENTS (300 AVERAGE)	351-600 STUDENTS (420 AVERAGE)
VESTIBULE	●																				100	100	150
QUEUING	●	○	●																		400	550	700
DINING ROOM		○	●							●	●	●						★	★		2000	3000	4000
SERVERY		●	●		▲	●	●				○										1000	1200	1600
SUPERVISOR					●	●	▲	▲	▲									▲			120	120	120
OFFICE				▲	●	○	▲	▲	▲						○	○		▲			100	100	100
KITCHEN			●	●	○		●	●	●	○	●						○		○		1500	1800	2600
DRY STORAGE				▲	▲	●											●				1000	1200	1600
GENERAL STORAGE				▲	▲	●											○				200	200	300
REFRIGERATOR/FREEZER				▲	▲	●											●				350	450	650
DISH WASHING		●					○				○								○		375	500	700
POT WASHING			○				●														150	200	300
MEN'S TOILET		●																	○		150	200	350
WOMEN'S TOILET		●																	○		150	200	350
MALE EMPLOYEES					○										○	○		○			120	180	250
FEMALE EMPLOYEES					○										○	○		○			120	180	250
LAUNDRY														○	○						100	100	100
RECEIVING			★	▲	▲	○	●	○	●					○	○			●			250	350	450
CAN WASH			★														●				40	40	75
JANITOR							○			○	○	○	○	○							40	40	40
NET																					8,265	10,710	14,685
GROSS																					11,123	14,425	19,790

□ UNIMPORTANT ADJACENCY
NOT A FACTOR

● NECESSARY IMMEDIATE
ADJACENCY

◀ VISUAL CONNECTION
REQUIRED

★ UNDESIRABLE REMOTE OR
ACOUSTICALLY SEPARATE

○ DESIRABLE LOCATE
CLOSE

Prototype Design Guidelines

Program Requirements: Square footage

In general, for each project, the Scope of Work will specify the space sizes to which the designer shall work. Net square footage is defined as the actual usable area for a specific space within the building envelope and is measured from finished inside wall to finished inside wall. Excluded from NSF are unused basements, unused attics, open and enclosed porches, stairways, elevator shafts, walls and partitions (except knee walls), structural elements, egress corridors, toilets (will be defined in the Scope of Work), janitor closets, electrical or power rooms, and mechanical equipment rooms.

Areas not included in NSF measurements are considered part of the building gross square footage (GSF). GSF is defined as the total area of all floors extended to the normal outside face of the building walls, including basements but excluding unused attic space. NSF to GSF ratios vary depending on the efficiency of the building lay-out, but an approximate ratio of 1.35 times NSF can be assumed to obtain the correct GSF for cafeteria buildings at Job Corps centers.

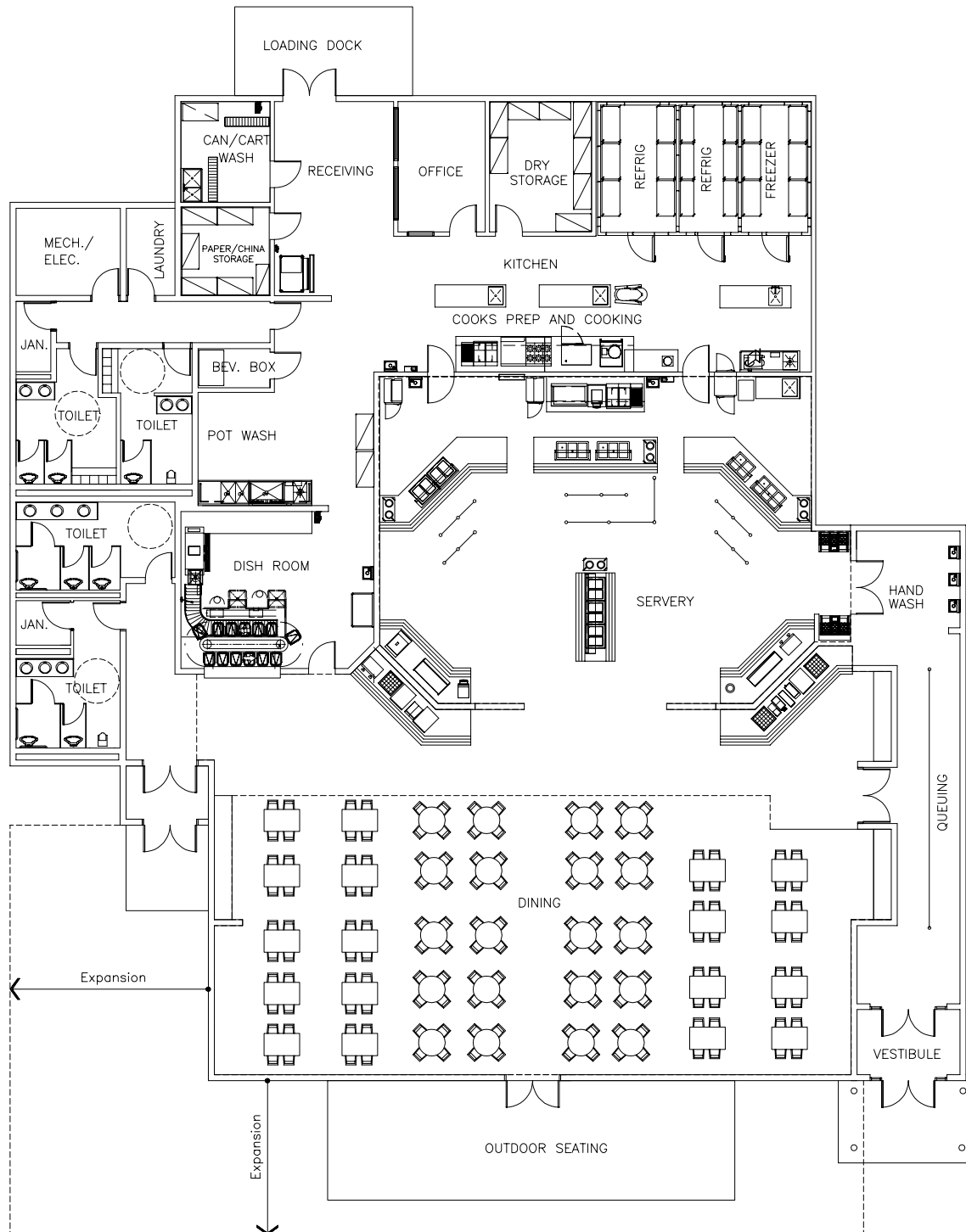
Contract Strength	225	280	335	390	445	475	500	555	610	665	720
Center Resident Population	175	225	275	325	375	400	425	475	525	575	625
Non Resident Population	50	55	60	65	70	75	75	80	85	90	95
Number of Seats	124	154	185	215	245	262	275	306	336	366	396
Dining Room NSF											
Seating	1,612	2,002	2,405	2,795	3,185	3,406	3,575	3,978	4,368	4,758	5,148
Beverages	200	200	240	240	240	240	240	320	320	320	320
Total Dining NSF	1,812	2,202	2,645	3,035	3,425	3,646	3,815	4,298	4,688	5,078	5,468
Public Toilets	280	280	322	322	322	354	354	354	354	389	389
Serving Area NSF	1,400	1400	1,800	1800	1800	2,400	2400	2400	2400	3000	3000
Support/Kitchen NSF			-								
Receiving	130	130	130	130	130	130	130	150	150	150	150
Dry Storage	100	150	150	150	175	175	175	175	175	200	200
Walk-in Refrig	250	250	250	250	325	325	325	450	450	600	600
Walk-in Fzr	120	120	120	120	175	175	175	200	200	225	225
China Storage	50	50	50	50	75	75	75	100	100	100	100
Beverage Room	50	50	50	50	80	80	80	80	80	80	80
Paper Storage	50	50	50	50	75	75	75	100	100	100	100
Managers Office	100	100	100	100	150	150	150	150	150	150	150
Preparation	50	50	50	50	150	150	200	200	200	250	250
Cold Prep	100	100	100	100	150	150	200	150	150	150	150
Cooks Prep	50	50	50	50	125	125	150	150	150	150	150
Cooking	300	300	300	300	350	350	400	400	400	450	450
Bakery	-	0	-	-	-	175	175	175	175	175	175
Pot Wash	100	100	100	100	125	125	125	150	150	150	150
Dishwashing	400	400	400	400	500	500	600	600	600	600	600
Laundry	-	-	-	-	100	100	100	100	100	100	100
Trash/Recycle	-	-	-	-	-	-	-	-	-	100	100
Jan /Cart Wash/Chem	100	100	100	100	100	100	100	100	100	100	100
Circulation	100	100	150	150	150	250	250	250	250	350	350
Toilets - Men	100	100	100	100	100	100	100	100	100	150	150
Toilets - Women	100	100	100	100	100	100	100	100	100	150	150
Total Kitchen/Support NSF	2,250	2,300	2,350	2,350	3,135	3,410	3,685	3,880	3,880	4,480	4,480

Prototype Plan

The following floor plan represents an acceptable model layout for typical Job Corps cafeteria buildings with the basic amenities for a typical center. It is understood that each project presents unique requirements to the designer but the end result of the design exercise should closely resemble these plans in basic organization, functional layout, and (in most cases) physical size. These parameters could change depending on a number of variables but these will be identified in each specific Scope of Work.

The goal of presenting this prototype design is to depict the programmatic requirements as well as the physical needs of Job Corps cafeteria buildings. However, the concepts presented herein are meant to be flexible and the designer is encouraged to present alternative solutions within the prescribed specifics of the project Scope of Work.

Prototype Plan



Cafeteria Prototype Floor Plan